Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-4. Cancelled.

5. A reaction product detection system adapted to flow a sample simultaneously and slowly through a plurality of discrete through-holes regularly arranged in a substrate of a device according to claim 6, the sample including fluorescence labeled DNA to be detected, thereby binding an analyte to probe molecules fixed in the through-holes, and

detect the analyte by a fluorescence detector.

6. (New) A device for binding an analyte to be detected, comprising:

a substrate made of non-porous material in the form of a film or sheet, having a plurality of discrete through-holes;

a carrier made of porous material, filled in the plurality of discrete through-holes, and

probe molecules attached to a surface of the carrier for binding the analyte to be detected,

wherein the probe molecules attached to the surface of the carrier in a first group of the through-holes are

different from the probe molecules attached to the surface of the carrier in a second group of the through-holes.

7. (New) The device according to claim 6, wherein the carrier is selected from the group consisting of a porous membrane, a nonwoven fabric, and a powder of porous glass.

8. (New) The device according to claim 7, wherein a pore size of the porous membrane or the powder of porous glass is 0.1 to 0.5 üm.

9. (New) The device according to claim 7, wherein a particle size of the powder of porous glass is 1 to 100 microns.

10. (New) The device according to claim 6 wherein the probe molecule is selected from the group consisting of DNA, RNA, PNA, their fragments, oligonucleotides, antigens, antibodies, epitopes, enzymes, proteins, and their polypeptide chains having at least one functional site.